

PROCEEDINGS OF THE CLUB

TUESDAY, JANUARY 10, 1905

The annual business meeting was held at the College of Pharmacy, President Brown in the chair and twenty members present.

W. W. Eggleston of the N. Y. Botanical Garden was elected to membership.

Resignations were accepted from Miss Theresa G. Williamson, Miss Nina L. Marshall, Miss Margaret F. Jagger, Mrs. Lillian Howard Perry, Mrs. Millie T. Ries and John P. Conroy.

The annual report of the treasurer showed gross receipts of \$2,697.80 for the year and expenditures amounting to \$2,226.80.

The report of the recording secretary showed that the club had held twelve regular meetings during the year with an average attendance of 19, and had listened to 23 stated papers.

The report of the editor-in-chief showed that the current volume of the *Bulletin* contained 682 pages and 26 plates besides numerous text-figures. Vol. 13 of the *Memoirs* was reported in press and partially printed.

Verbal reports were received from the editor of *TORREYA*, the corresponding secretary, the chairman of the field committee, and the committee on local flora.

Professor Underwood, chairman of the committee on index cards of current botanical literature submitted a report covering four years and showing receipts of \$783.21 and expenses of \$643.21. His committee proposed withholding a small reserve fund, and signified the intention of turning over \$115.00 to the Club.

The following resolution was presented :

Resolved: That the Torrey Botanical Club, recognizing the importance of preserving natural scenery in public parks, such as would be permanently injured by the proposed railway line through south Bronx Park, heartily joins other organizations in protesting against the construction of such road through Bronx Park.

This resolution was unanimously passed and copies were ordered mailed to the Rapid Transit Commission and the public press.

A letter was read from President Brown declining a reelection and the following resolution, proposed by Dr. Britton, was put by Vice-President Rusby and unanimously adopted by a rising vote :

Resolved, That the Club receives the letter of its President, ex-Judge Addison Brown, refusing a renomination to that office, with very deep regret, and

Resolved, That the Club hereby expresses its gratitude to Dr. Brown for his valuable services as President during the past fifteen years, and its hope and expectation that he will continue to give the Club the advantage of his wisdom and advice.

The Club then proceeded to the election of officers for the ensuing year.

Nominations were made and upon motion the secretary cast an affirmative ballot for the following: *President*, Henry H. Rusby; *Vice-Presidents*, Edward S. Burgess and L. M. Underwood; *Treasurer*, F. E. Lloyd; *Recording Secretary*, Edward W. Berry; *Corresponding Secretary*, John K. Small; *Editor*, John H. Barnhart; *Associate Editors*, N. L. Britton, Tracy E. Hazen, Marshall A. Howe, D. T. MacDougal, W. A. Murrill, H. M. Richards, and Anna Murray Vail.

A short address of acceptance was made by President-elect Rusby.

The question of changing the place of meeting of the first meeting in each month from the College of Pharmacy to the American Museum of Natural History was introduced and after discussion it was moved that Drs. Rusby and Britton be constituted a committee with power to make such change provided that the expense proved to be trifling.

EDWARD W. BERRY,
Secretary.

TUESDAY, FEBRUARY 14, 1905.

The meeting was held at the American Museum of Natural History, President Rusby in the chair and fifteen members present.

Minutes of the annual meeting were read and approved.

The president appointed the following standing committees and delegates :

Finance, J. I. Kane, C. F. Cox; *Admissions*, E. S. Burgess, Delia W. Marble, John K. Small; *Local Flora, Phanerogamia*, N. L. Britton, E. P. Bicknell, Fanny A. Mulford, W. W. Eggleston; *Local Flora, Cryptogamia*, L. M. Underwood, M. A. Howe, W. A. Merrill, Elizabeth G. Britton; *Program*, N. L. Britton, M. A. Howe, L. M. Underwood; *Field Excursions*, Eugene Smith, Geo. V. Nash, Marie L. Sanial, E. W. Berry, Percy Wilson, H. H. Rusby; *Delegates to the Council of the Scientific Alliance*, H. H. Rusby, N. L. Britton, Addison Brown; *Delegates to the International Botanical Congress at Vienna*, N. L. Britton, L. M. Underwood.

Of the scientific program, the first paper, which was illustrated by lantern slides, was by Dr. George H. Shull, and was entitled "Stages in the Development of *Sium cicutaeifolium*." Dr. Shull presented briefly the great range of leaf-form in this species at different stages of growth, concluding that these various stages give no safe indication of ancestral forms.

The life-cycle of *Sium* fits it for the conditions under which it grows at different stages of its growth, it being mesophytic, hydrophytic and xerophytic in turn. This cycle of changes seems to be independent of external conditions and proceeds regularly without regard for the environment. The consideration of a number of rejuvenated buds shows that rejuvenescence may be brought about by submerging senescent buds in water, and that the later the stage of senescence the earlier will be the juvenile forms which are induced to appear. Evidences were presented tending to prove that the proximal leaflets of pinnate leaves are homologous in any series of leaves taken from the same plant and that the other leaflets are likewise homologous counting from the proximal pair.

The paper was the subject of considerable discussion.

The second paper was by Dr. Tracy E. Hazen, on "Recent Advances in the Phylogeny of the Green Algae." The subject was introduced by a sketch of Borzi's group Confervales, now enlarged into the class Heterokontae, comprising genera showing natural affinities, taken from the three old orders Protococcales, Confervales and Siphoneae. This new class, accepted by all

recent investigators, serves to indicate the artificiality of the traditional classification.

The clearer lines of descent of the chief groups of Chlorophyceae from the unicellular, motile *Chlamydomonas* were traced; the first tendency, in the direction of aggregations of motile cells, finding its highest expression in *Volvox*; the second tendency, in the direction of septate cell division, to form non-motile bodies of increasing solidarity, leading through the Tetrasporaceae to the Ulvaceae (which have been placed in a separate order, Ulvales, by some recent authors), and finally, through such forms as *Stichococcus*, to the typical filamentous and branched forms culminating in *Coleochaete*. The third, or Endosphaerine tendency from *Chlamydomonas*, as suggested by Blackman, was held by the speaker to furnish an unsatisfactory origin for the Siphoneae, inasmuch as the endophytic forms associated with *Endosphaera* may be regarded as too specialized in their mode of life at least. It is much more natural to derive the Siphoneae from the septate, multinucleate Cladophoraceae. The latter group may well be regarded as an intermediate order, easily derived from the Ulothrichaceae through such forms as *Hormiscia* (*Urospora*) and *Rhizoclonium*.

The recent proposition of Bohlin and Blackman to regard the Oedogoniaceae as forming a class derived from a separate unicellular ancestor is at least premature, and it does not appear at all impossible that this group may have been derived from a *Ulothrix*-like form as suggested by Oltmanns. The Conjugatae furnish a perplexing problem, but the speaker preferred to regard this group as forming an order of Chlorophyceae rather than as a separate class, in view of present evidence.

EDWARD W. BERRY,
Secretary.

NEWS ITEMS

The tenth annual winter meeting of the Vermont Botanical Club was held at Burlington, January 18-19, with President Ezra Brainerd of Middlebury College in the chair. Twenty-two papers